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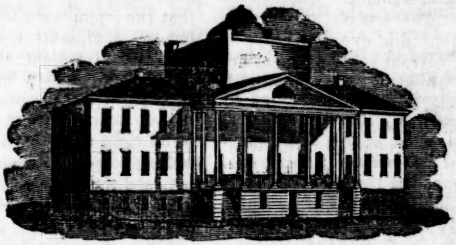
BOSTON MEDICAL AND SURGICAL JOURNAL.



MASSACHUSETTS GENERAL HOSPITAL.

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I.

Account of a Case of Empyema, with the Appearances on Dissection.

By Z. B. ADAMS, M.D.

C. G. about five years old, had always enjoyed tolerable health, though puny and palefaced in his appearance, until the attack of the disease which terminated his life.

About the 1st of January he began to droop, after complaining of being weary ; at times was observed to be slightly feverish, though he did not appear to have taken cold. Some common family medicines were prescribed, he was still permitted to go to school, and but little notice was taken of his complaints until the 10th, when medical aid was first called.

He was found with the usual symptoms of fever, with a tendency to the lungs, loss of appetite, pulse small and frequent, tongue slightly coated with a whitish fur, pain in the side, and an unusual soreness to the touch all over his body and limbs, accompanied by a slight dry cough. Most of these symptoms were in a few days subdued by the usual evacuants and the application of a blister to the pained part. His tongue became clean, his skin cooler, his appetite returned, and he was considered convalescent, though the same universal soreness continued, with nearly the same frequency of pulse. In a few days, however, he began to be attacked, at irregular intervals, with rigors more or less severe, followed by heat and profuse sweats. These were also accompanied by a pain, which he referred to the abdomen, the left side, a little above the ilium, which was speedily removed by a blister. As no particular evidence existed at this time of any local affection as the cause of the paroxysms, and especially as they became very regular in their daily occurrence, it was determined to try the liq.

arsenical. as in intermittent fever, which however disagreeing with the stomach, the sulph. quin. was substituted, which immediately put a check to the rigors, and much diminished the whole paroxysms. There was, however, at some period in every twenty-four hours, a great sense of uneasiness and restlessness, accompanied by increased heat, difficulty of breathing, and pulse nearly as frequent as could be counted; this would sometimes last three or four hours and gradually subside, after which he would call for food and remain tolerably comfortable the remainder of the day. It was thus rendered probable that suppuration in some internal organ, or some of the large joints, might be the cause of these paroxyms. A consultation was held; but as nothing could be made evident, it was concluded to use the warm bath, with light tonics and aperients, and wait the event. He soon however became manifestly much worse, the rigors and fever returned as violently as before, with the general soreness, without pain in any part. In a short time the violence of the paroxysms was again subdued by the sulph. of quinine, when he remained much as before, though evidently growing weaker and more emaciated. His breathing also during his uneasy turns, became very rapid and anxious. During the first six weeks of his illness, it was with difficulty he could be removed from his bed; motion hurt him, though we could not tell where, and he wished to lie continually. At this time, though he rested chiefly on his back, yet he would lie on either side without inconvenience. A small dry cough had followed him through the whole; but now he would have sometimes whole days of coughing and raising a thin glairy mucus, which nothing would seem to quell.

At this time Dr. Jackson saw him, and thought it pretty evident that the symptoms indicated the formation of matter somewhere; and upon examining the abdomen he thought a little more tenderness on pressure, was perceived on the right side, and advised the application of a blister to that part, and that no more active internal treatment should be pursued, until a little more light could be thrown upon the case. In the mean time, recommended gentle rubbing of the body with a mild liniment, with a view to determine the part diseased, and in particular, that the hips should be carefully examined. The blister proved a very sore one, and was succeeded by three large boils, which successively suppurated and discharged freely. Immediately after the application of this blister, it was perceived that the three lower ribs of the right side began to project, and soon a very considerable tumor became evident there; the bowels also were growing more and more tumid, with a considerable unequal protuberance on the left side. It is somewhat remarkable, that during the boils he could not lie on the right side, but rested on his left side or back. During the whole sickness he could not stand straight, nor bear much weight on his feet. Soon after the appearance of the tumor, the right side of the chest was examined with the stethoscope and by percussion. Percussion evidently gave a dull sound, though, from fear on the part of the patient, it was imperfectly performed. With the ste-

thoscope, Dr. Jackson agreed with me in the belief that the sound of respiration could be heard at the upper part of the chest, and thinks it now probable that, at that time, (viz. a fortnight before death,) the upper part of the right lung might have admitted air. It appeared to me that the sound of respiration could be indistinctly heard at the very lowest point of the tumor, which led me to think it probable that the abscess might be below the diaphragm. Dr. J. however, concluded that the right thorax was the seat of the disease, though it could not be determined whether the pus was formed in the substance of the lung, or between the pleuras. He advised to watch carefully for any appearance of pointing externally, and if it should happen, that the abscess should be opened.

The tumor extended so low that it was evident the diaphragm was much pressed downwards, if indeed the tumor were not below it. From this time, the little patient began more evidently to sink; his breathing became every day more and more laborious, and he was obliged to choose the semi-erect position, inclining to the right side; until, for some days before his death, every power of his system, both mental and corporeal, was brought into requisition to assist in respiration, so that for several days and nights he could scarcely lose himself for a moment in sleep, without danger of suffocation. He finally died, apparently from the continued and increased pressure upon the bronchiæ, rendering it impossible for him to draw another breath. He retained his senses to the very last.

Twenty hours after death, (which took place on the 15th of April,) the body was examined. External appearance natural as to color; the whole body much emaciated; abdomen very large and hard, and particularly protuberant on the left side. The tumor on the right side very distinct, pressing out the three lower ribs, though without any appearance of pointing. Upon making an incision down over the sternum and linea alba, the integuments and muscles were found exceedingly thin. On opening into the abdomen, the liver appeared to occupy almost the whole of it; being forced out of its place by pressure above the diaphragm, which was observed to be protruded downwards quite into the abdomen. The ribs of the right side were forced apart by the distention from within, so that the muscular covering of the chest was very thin; and accidentally, while removing the integuments, it was touched by the knife, and immediately there followed a jet of purulent matter to the height of nearly a foot. The opening was immediately enlarged, and the body turned over, that the remainder might be caught in a vessel; and as nearly as we could determine, about two quarts of a thin greenish pus, filled with floculi of coagulable lymph, were discharged. Upon minute examination, it was concluded that the lungs were sound on both sides, that the abscess was formed between the pleuras, and that the right lobe of the lungs was so entirely compressed by it as to be completely useless. The mediastinum was pressed considerably towards the left side. The left lobe of the lungs appeared small, but healthy.

Boston, April, 1828.

Additional Case. By JOHN WARE, M. D.

IN connexion with the preceding case, it will perhaps be interesting to relate one having some points of resemblance with it, particularly as it respects the appearances on dissection.

William Parsons, aged 25, was admitted into the Boston Alms-House July 16th, 1824, in a state of great distress. He had received an injury upon the right side of the chest some time since, which had been followed by his present complaint. His symptoms were those of an advanced stage of unrelieved pneumonitis or pleurisy. The pain in the side was most excruciating; the respiration was short, laborious, hurried, was carried on with great agony, and could not be maintained in the horizontal posture without much distress. The pulse were very quick. The cheeks, lips and tongue livid; the extremities livid and cold. The stethoscope was not applied, but upon percussion the left side of the chest gave the natural sound, whilst the right resounded as if it were hollow. This patient was bled, blistered, and treated by mercurials. He was relieved in some measure of his distress, and was able in some degree to lie down; but died July 19th.

On dissection, when the skin had been removed and the cartilages of the ribs cut through, there was a great escape from the right side of a very fetid gas. When the sternum was removed, the right cavity of the thorax seemed to be half full of a dirty, whey-like sort of pus, with shreds of lymph floating in it. The lungs seemed at first to have entirely disappeared, and the remaining part of the cavity of the chest had been occupied by the gas which had escaped. On a more particular examination, the remains of the lungs were found at the upper part of the cavity, without any breach of surface whatever, or actual loss of substance by ulceration, but compressed by the effusion of fluid and gas into the cavity of the pleura, to a size not larger than that of a man's fist. The form, relative size, &c. of the several lobes were perfectly distinct, although they had shrunk away into the appearance of little shrivelled knobs, and looked very nearly as they would have done after soaking for a long time in a strong alcoholic solution of corrosive sublimate. The pleura lining the chest had been highly inflamed, and was covered by a layer of dark colored coagulable lymph.

II.

A Case of Malignant Chickenpox.

By D. HUMPHREYS STORER, M.D.

ON the 29th of April, between 8 and 9 o'clock, A. M., I was called to visit a child of Mr. James Spear, in Front Street. The child, a boy eight months old, was found lying in its mother's arms, in a comatose state. Before an opportunity was afforded me of making any inquiries, the mother very anxiously desired my opinion of the disease. Several *vibices* situated on the forehead and left temple, four or five in number, one or two of the size of a fourpence, and varying in color from a light brown to the darkest venous blood, first claimed my attention. It being impossible to

distinguish the nature of the original eruption from these appearances, the mother was requested to undress the child. Upon examination, the body presented great marks of exhaustion. The glutei were found covered over their entire surface with *petechiæ*, most of them quite small, of a dark purple color. Upon each hypogastrium several vibices were observed, three or four of the size of a half cent, surrounded with a bright red areola,—in one or two instances nearly an inch in diameter, and in hardness and external appearance resembling the inflamed surface around the vaccine vesicle. Surface of extremities presented no unusual appearance: breast and back of shoulders covered with well-marked vesicles of chickenpox. The extremities were cold: the temperature of the trunk of the body was considerably diminished. The radial arteries were scarcely perceptible to the touch. Some nausea was present, and slight hiccough. Upon being told the child was affected with chickenpox, the mother's anxiety was somewhat diminished, and from her I was enabled to collect the following history of the case.

Two of her children had just recovered from this affection, which was quite prevalent in the neighborhood at the time. Both of these children suffered but slightly—no more than children generally, with this disease. Symptoms of disease first showed themselves in my patient on the morning of the 27th, when the vesicles appeared in every respect similar to those of the other children, with the exception of a greater degree of redness. During the day and night of the 27th, and the day of the 28th, no peculiar appearances were noticed; no increased febrile affection was observed; the breast was taken readily, and the excretions were natural. On the evening of the 28th, the vesicles on the forehead and abdomen began to change to a deeper red; and with this change in the appearance of the eruption, increased heat on the surface of the body, refusal of the breast, and incessant restlessness, were remarked. These symptoms continued until six in the morning, when the child appeared better, became more quiet, and nursed with some avidity. Between six and eight, however, the anxiety of the parents was increased by a return of heat and restlessness. During the night several evacuations of a natural appearance had occurred from the bowels: no urine was passed during the night, but between six and eight in the morning, the bladder was two or three times evacuated; urine presented no peculiarity.

I determined immediately to endeavor to bring about a reaction by emetics; and accordingly wrote for an antimonial. As, however, during the few moments necessarily occupied by the examination, my patient evidently became more comatose, and the probability of relief less, I felt desirous for a consultation. Dr. George Hayward was called. The case was considered by him an uncommon one; he expressed his opinion decidedly, that unless the system could be aroused within a short time, my patient must sink. He advised the wine of ipecacuanha in conjunction with the warm bath. I remained with the child till between one and two o'clock. The exhibition of

three ounces of the wine of ipecacuanha, and four grains of tartarized antimony in divided doses, with every effort to procure vomiting by irritating the fauces, applying pressure to the epigastrium, and making frequent changes in the position of the body, produced no effect. The bowels were freely opened during the forenoon; evacuations therefrom, natural. Finding it impossible to excite the system by emetics, as a dernier resort cordials were ordered freely, and sinapisms were applied to the extremities. My patient gradually sunk, and expired at 10, P. M.

No alteration for the worse was observed in the petechiæ, or vibices, after 11 o'clock, A.M. I say, *for the worse;* a slight change did take place after the first application of the warm bath, which gave us some hope: the purplish tinge seemed to change to a lighter shade, as if vitality had not entirely ceased there. This alteration, however, was observed but for a few moments; the parts soon presented their former morbid characters.

The body was examined twelve hours after death, in presence of my friends Drs. Robinson and John Flint. No appearance of derangement could be seen in the lungs or heart. The abdomen being opened, the liver was found healthy, gall-bladder full of bile, spleen presented nothing peculiar. The stomach was considerably distended with flatus, containing no liquid whatever; its villous coat at the pylorus redder than at any other part, but not unusually so. The vessels of the mucous membrane of the duodenum, to the extent of three or four inches, were considerably injected, probably owing to the irritation produced by emetic substances, which had passed through the stomach, and lodged there. The kidneys, *in situ*, presented somewhat of a singular appearance, being rather larger than usual, and very black, looking like clots of blood. Being removed from the body and their substance cut into, the parietes of the pelvis were found considerably hardened; cavities of the pelvis empty; ureters and bladder were seen perfectly healthy. Upon removing the scalp from the cranium, its inner surface was found considerably injected, those parts particularly, over the parietal bones. Between the integuments and cranium some water was effused: water was also effused under the arachnoid membrane. There was a slight degree of congestion in the vessels on the surface of the brain. The ventricles contained no unusual quantity of fluid. The substance of the brain showed no marks of disease.

Remarks.

It is worthy of remark, that the patient in whom this affection made its appearance, was a remarkably healthy, fine looking child,—the most robust of the family.

I am acquainted with no author who speaks of a similar termination of this disease. Heberden refers to an eruption which he conceives may be a "malignant sort of chickenpox;" but which differs from the case above described, in the severity of the febrile affection preceding the disease, in the length of the disease itself, and in the vitality of the system not being exhausted; in a word, which resembles this case only in being an aggravated form of this affection.

Boston, May, 1828.

III.

From the London Med. Repository.

MALA PRAXIS.

Rolfe *vs.* Stanley.

A CASE of great interest to medical men was tried in the Court of Common Pleas about a fortnight ago. It was an action brought by a person named Rolfe against Mr. Stanley, Assistant Surgeon to St. Bartholomew's Hospital, to recover damages for an alleged neglect and want of surgical skill in the treatment of an injury of the knee-joint. We shall lay before our readers the evidence given on the occasion, as well as the charge of the learned judge to the jury, and leave them to form their own opinion of the merits of the case.

Mr. Sergeant Cross stated the case, and called the following witnesses:—

Mr. Henry V. Garman stated that he is a surgeon-apothecary. On the 2d of December, 1826, he was in the neighborhood of Mile-end road, and was called to attend the plaintiff. He found him in a cottage about half an hour after the accident occurred. He appeared to have received a laceration of the right knee-pan, in which there was a hard and movable substance. He washed away all the superficial particles, and, after putting on some simple application, he took him home. He went first for Mr. Green, the surgeon, but not finding him at home, called for Mr. Stanley, who resides in Lincoln's Inn fields. He came in three hours after, and the patient's knee was more swollen. Mr. Stanley appeared to me to have made a proper examination, and he requested me to put the limb in splints, to prevent the motion of the joints, and keep the limb quiet.

Mr. James Rolfe, the father of the plaintiff, said he was not present when Mr. Stanley examined the plaintiff's knee, but when he came down stairs he prepared him for the worst. He said the plaintiff would have a stiff joint as long as he lived, and that he might be glad if nothing worse occurred. He added, that there was a shocking fracture, and about the fourth or fifth part of the knee-pan was broken off. The splints remained on for five or six days, when Mr. Stanley took them off and bent the knee, which caused such excruciating pain, that the plaintiff was obliged to request him to desist. When the splints pressed on the hard substance, it made him quite sick with pain, and he was always pushing them down. When this was told to the defendant, he said the patient must have patience. Mr. Stanley used sometimes to attend twice a-day for the first six days, and when spoken to on the subject, he said the knee-pan was broken, and the hard substance felt in that part was a portion of the knee-pan, broken off. On the 18th of January, he said he could not do any more for him, and that his cure depended more on himself than upon him, the defendant. When the plaintiff got well enough to be removed, he was sent to Hammersmith for a change of air. The wound then swelled as large as his head, and discharged a quantity of matter, in consequence of which it was necessary to call in Mr. Lilly. The plaintiff was not able to attend to business during this time.

Cross-examined—He did not walk to see the Duke of York's

funeral, but went in a coach. Mr. Stanley discontinued his visits about that time. Mr. Stanley might have called on that day, but he could not speak positively. The plaintiff's principal object in going to Hammersmith was to see the Duke of York's funeral; he also thought the change of air would do him good. During his absence Mr. Stanley called twice. The plaintiff came back in a fortnight from Hammersmith.

Re-examined—Mr. Stanley said he might take moderate exercise as soon as he was able; his son always pointed out the knee-pan as the seat of pain.

Examined by the Judge—He did not think Mr. Stanley had notice of the discharge in the plaintiff's knee.

Mr. Charles Lilly is a Member of the College of Surgeons. He was called in to attend the plaintiff in September; he found him very feeble; there was a hard moveable substance in the knee-pan near the surface. He examined it, and advised soothing poultices to be applied and the patient to be kept quiet. In a month his health was very much improved, and on examining the knee at the end of the second month he found the hard substance had advanced so near the surface that one point of it had come through the wound. He enlarged the orifice, and extracted the flint now produced, and afterwards removed a second piece of flint; a third portion came out in the dressing of the knee. The pan was certainly not fractured; and if it had been broken, that could undoubtedly have been discovered.

Cross-examined—When first he saw the knee, he thought the hard substance was bone. He could not imagine where it came from, or pretend to say how it arose. Exercise, he supposed, would tend to bring the hard substance to the surface, but nature would, of course, have the same effect; if the mode of treatment required that no probing should take place, the same course would be adopted whether there was a piece of bone in the knee-pan, or a foreign substance.

Re-examined—It would be impossible to say, from the appearance of the scar, if it was large enough to admit the piece of flint. If that had been taken out in the first instance, the wound would have been healed when he first saw it.

Mr. Sergeant Taddy addressed the Jury for the defendant, and called the following witnesses:—

Sir Astley Cooper, Bart.—I have attended to the accounts given by the different witnesses, and, having given the subject all the attention I am capable of, I cannot discover any want of skill or attention on the part of Mr. Stanley; and if I had discovered a hard substance under the same circumstances, my mode of treatment would have been the same as Mr. Stanley's. The present was a very doubtful case, and one which required great caution. No man is more informed in anatomy than Mr. Stanley. Probing the wound at that time might have destroyed life, or, at least, occasioned the loss of the limb; for the smallest wound made in the knee-joint, such as that made by probing, might have destroyed life. I have seen an opening in that part less than that which might be made by a crow-quill, and such opening, to my knowledge, destroyed life in less than

a week. If an incision had been made, or probing used under these circumstances, he (the surgeon) would probably have opened the knee-joint in doing so, and in that way would have inflicted some serious injury upon the limb, and this latter mode of treatment ought not to have been followed under such circumstances. A fall from a horse would be likely to break the patella, and it is the only way I have known longitudinal fractions of the patella occur. The natural process for a hard substance (as in the present case) is to approach the surface of the skin. I think Mr. Stanley a most complete judge in such cases; and if I had been in attendance upon the patient, I should not have varied the treatment in any way from that followed by the defendant.

Cross-examined—I consider myself capable of saying what treatment ought to be used in a case I had not seen, supposing all the circumstances are afterwards detailed to me. I have heard the facts from Mr. Stanley before I came into court; he called on me and mentioned the circumstances, and I gave my opinion on his statement of the case; but my opinion has been very much influenced by the evidence I have heard to-day, and particularly by the clear and distinct statement of Mr. Lilly. I believe the knee-joint was not broken. If I had been called to attend a patient who complained that a certain spot was the seat of constant pain, I should (if any new circumstances occurred) look again at the wound; but, if I had made up my mind from the beginning, from my knowledge of anatomy I would not alter the mode of treatment; it would be very dangerous to be constantly removing the bandages, and I should say that the man who would frequently examine fracture, and remove bandages for that purpose, would be a very unskilful surgeon, and extremely unfit to have the care of a patient.

Mr. Sergeant Cross—There was no fracture in this case; I therefore wish to know from the witness if, in case the patient frequently pointed out a part as the seat of pain, whether he (Sir A. Cooper) would not have examined that part a second time, in order to see if there was any thing which required further consideration?

Sir A. Cooper—If I thought I could relieve pain by again examining the wound, I should do so; but I would examine a case of this kind, in the beginning, and, having made up my mind on the nature of it, I would not vacillate in my opinion, or alter the general mode of treatment.

Re-examined—Mr. Stanley did every thing a good surgeon could do, and left nothing undone. This is my opinion, putting out of my mind all I have heard out of Court, and judging only by the evidence adduced to-day. I must say that I came into Court with some doubt; but it was the evidence of Mr. Lilly that made me as firm as I am at present.

Mr. Brodie stated, that he is a surgeon of St. George's Hospital. He had been in Court since the opening of the case; and, judging by the evidence alone, he was convinced that Mr. Stanley had shown no want of skill or attention. A fracture of the patella is not uncommon when a fall from a horse has taken place. It would not be easy, under the circumstances, to distinguish a piece of

bone from a foreign substance. If witness had been called in he would have followed the same mode of treatment as that pursued by Mr. Stanley, whom he considered a skilful anatomist and experienced surgeon.

Cross-examined--If he had been employed to attend the patient, he would have kept him as quiet as possible, and done every thing to prevent inflammation. He does not recollect any thing else he would have done on the occasion. A person who saw the wound eight or nine months after the accident, might be better able to judge of it than at first; and a surgeon who examined it three hours after it occurred would see it to a disadvantage, as the part must then be considerably swollen. He heard several accounts of this case. The first was from a friend of the plaintiff; the second from the defendant; and the third from Mr. Lilly. From all he heard on the subject, he did not think that any blame was attributable to Mr. Stanley.

Mr. Travers and Mr. Green, surgeons at St. Thomas's Hospital, concurred in stating that the defendant had pursued a skilful and proper course of treatment in the present case, and that no blame could attach to him.

Mr. Bell, an eminent surgeon, said the defendant had used all due skill and attention in the mode of treatment above referred to.

Cross-examined—-Some doubt might have been caused in his mind by the pain not subsiding, and the hard substance not adhering to the knee-pan after two months.

Mr. Abernethy was next examined, and he stated that if he had been called to attend the plaintiff, he would have followed the same mode of treatment used by Mr. Stanley, against whom he saw no cause of complaint on the ground of want of skill or attention.

Mr. Sergeant Cross having replied,

Mr. Justice Burroughs summed up the case, and observed that if the Jury were of opinion that the defendant had been deficient in point of skill, or negligent in his attention to the plaintiff, they must find a verdict for the latter; but if they were of opinion due care had been used, and proper talent exercised, the defendant was entitled to their verdict. Some of the first surgeons in Europe all agreed in saying they would have done as Mr. Stanley had done; and, what was remarkable, they all said it would have been dangerous to have made an incision at the time; but, considering the evidence of the very learned surgeons who were examined, the plaintiff's case was extremely weak. If they (the Jury) believed what these witnesses said, he could not fancy but their verdict would be for the defendant.

The Jury, after retiring for an hour, returned with a verdict for the plaintiff.—Damages £30.

IV.

SELECTIONS FROM FOREIGN JOURNALS.

On Certain Properties of Sulphur.

The effect of heat on sulphur in the first fusing it, but afterwards causing diminution of fluidity, in a certain degree proportionate to the temperature, has been long and generally known, as well also as the peculiar soft state into

which the sulphur may be brought, by pouring it, when hot and thickened, into cold water. M. Dumas has been led to examine these phenomena for the purpose of acquiring a precise and particular knowledge of the effects and changes.

Fused sulphur began to crystallize between 226 and 228 deg. Its fusing point may be considered as 226.4 deg. Between 230 and 284 deg. it is as liquid as a clear varnish, and of the color of amber; at about 320 deg. it begins to thicken, and acquire a red color; on increasing the heat, it becomes so thick that it will not pour. This effect is most marked between 428 and 572 deg.: the color being then a red brown. From 572 to the boiling point it becomes thinner, but never so fluid as at 248 deg. The deep red-brown color continues until it boils.

When the most fluid sulphur is suddenly cooled, it becomes brittle, but the thickened sulphur, similarly treated, remains soft, and more soft as the temperature has been higher. Thus at 230 deg., the sulphur was very liquid, and yellow; and cooled suddenly by immersion in water, it became yellow, and very friable; at 374 deg. it was thick, and of an orange color, but by cooling, became at first soft and transparent, but soon friable, and of the ordinary appearance; at 428 deg., it was red and viscid, and when cooled, soft, transparent, and of an amber color; at the boiling point it was a deep brown-red color, and when cooled, very soft, transparent, and of a red-brown color.

It is not necessary, as is sometimes stated, to heat the sulphur a long time to produce this effect; all depends upon temperature. The only precaution necessary is, to have abundance of water, and to divide the sulphur into small drops or portions, that the cooling may be rapid. If it be poured in a mass, the interior cools slowly, and acquires the ordinary hard state. When the experiment is well made at 446 deg., the sulphur may be drawn into threads as fine as a hair, and many feet in length.

M. Dumas, in remarking upon this curious effect of sudden cooling, classes it with the similar effect which occurs with bronze. Although difficult to assign the exact cause, yet he notices that the tendency to crystallize can evidently be traced as influential over some of the appearances, the hardness and opacity, for instance, which always occur together, when the crystalline state is assumed; whereas, when rapid cooling has hindered crystallization, the mass remains soft and transparent, until it crystallizes, which usually happens in twenty or thirty hours.—*Ann. de Chimie.*

Separation of Bismuth from Mercury.

M. Serullas has pointed out a striking instance of the separation of bismuth from mercury. He says a twelve hundred thousandth, and even less of bismuth, when dissolved in mercury, may be separated and rendered visible by the addition of a certain quantity of the amalgam of potassium and a little water. A black powder is observed to rise from the substance of the metal, and is a mixture of bismuth and mercury in a very divided state; it rises to the surface or adheres to the vessel.

Copper, lead, tin and silver, are equally separated, but not so promptly, or so evidently to the eye, as bismuth; for they are not associated with divided mercury, at the time of their separation, like the latter. With bismuth, a mere atom is rendered visible, and M. Serullas thinks that chemistry does not present a more delicate test than the amalgam of potassium for bismuth in mercury.—*Ann. de Chimie.*

On a New Acid existing in Iceland Moss.

The reddish purple color which is produced by adding a decoction of Iceland moss to per-salts of iron, has been attributed to the presence of gallic acid, but is found by M. Pfaff to be occasioned by a new acid body, which may be separated in the following manner: A pound of the lichen cut small is to be macerated in solution of carbonate of potass, until all that is soluble is separated; the above quantity will neutralize two gros (about 120 grs.) of the carbonate. The filtered liquor is to be precipitated by acetate of lead, and the brown precipitate produced, when well washed, is to be diffused through water, and sulphuretted hydrogen passed through it until all the lead is separated. The filtered liquor is acid, and by spontaneous evaporation, yields dentritic crystals. The crystals, when heated, carbonize, but produce no odor like that of tartaric acid, and lime is left. If they be dissolved, and acted upon by alkaline carbonates, carbonate of lime is thrown down, and alkaline salts, containing the new acid, are produced.

The potash salt crystallizes in quadrilateral prisms, needles or plates, and is not deliquescent. The soda salt has similar characters, and the ammonia salt crystallizes in needles. These salts abundantly precipitate the acetate and muriate of iron, of a red-brown color; they precipitate sulphate and nitrate of zinc white; muriate of manganese slightly of a clear brown color; barytic and strontian salts abundantly white; being mixed with strong solutions of muriate or acetate of lime, they gradually produce an acidular crystalline white precipitate; acetate of silver yields an abundant white precipitate, which does not change color in less than twenty-four hours; they do not precipitate salts of glucina, magnesia, alumine, uranium, nickel, copper, cobalt, gold, or platina. This substance has been named the lichenic acid, and is distinguished from boletic acid by the different character of its vapor, and by forming an insoluble salt with baryta.—*Bull. Univ.*

V.

HOSPITAL REPORT.

Bruised Hand.

March 15th.—John Bullock, seaman, North-port, aged 38. Accident happened on board vessel, an hour before he was brought into the Hospital. In reaching out his hand to put on a *fender* to prevent the vessel which had just arrived at the wharf, from striking it, his hand was caught between the vessel and the post of the wharf; the full force of the vessel being thus impelled against his hand. The palm of the hand was very much injured, the integuments torn up so as to have the appearance of a flap. A piece of the thumb bone was broken at the joint, and came out through the flesh; the thumb being left supported only by

the integuments, and hanging loose. The whole hand was dreadfully mangled; pain very violent. After the injury he had a very large quantity of brandy given him by his friends; was of strong constitution, stout and muscular; habits temperate. Pulse not accelerated.

16th.

R. Hyd. submur.
Pulv. jalap, āā gr. xv. sumat statim.

Venesectio ad ℥vj. Appl. foment. papaver. quarta quaq. hora. Post alvi solut. si dolor perman.

R. Pulv. opii, gr. iv. ft. pil.

Diæt. liquid.

17th. Appl. catapl. communis quart. quaq. hora.

18th. Omitt. catapl. et appl. catapl. farin. lini quarta quaq. hora.

19th.

R. Infus. senn. comp. ℥ij. quarta quaq. hora.

Omitt. catapl. lini et appl. catapl. panis.

20th. Mortification taking place. Wound so offensive as to render it necessary to remove him to a separate ward; and to use the fumigation of chlorine.

Appl. vuln. pulv. carb. Catapl. cerivisiæ tertia quaq. hora. Cap. vespere opii, gr. iv. ad sextam et octavam horam. To be allowed a pint of porter in a day.

21st. Took two pills in the night. Poultice produced so great pain it was omitted, and a common poultice substituted. Bowels costive.

R. Tr. rhei,
Aq. pur. āā ℥i. M.

Repet. quart. quaq. hora, usq. ad alvi solutiom. Cap. pil. op. vespere, ut heri. Appl. pulv. carb. ut antea. Bene foveat. manus cum infus. tanacet. et absinth. ter in die. Cont. cetera.

22d. In the afternoon violent pain in the hand and much bleeding. After which he became more easy.

Bene lavet. manus aq. et sapon. Teget. pars denud. cum linteolo, supra hoc, appl. catapl. cerivisiæ.

R. Inf. cinch. ℥vij.
Tr. ejusd. ℥i. M.

Cap. ℥i. quater in die. Sumat pil. op. gr. iij. ut antea, si dolor redeat.

23d. Hand looks much better; the yeast poultice gave him less pain than formerly, and was continued.

25th. Thumb removed by cutting the integuments by which it hung. It was found to have been kept alive, and nourished by the collateral vessels from the forefinger and root of the thumb.

R. Tr. rhei,
Aquæ, āā ℥i. M.

26th. Hand much less offensive. Took four doses of the rhubarb without effect.

R. Sol. magnes. sulph. ℥iv.

Impon. manus in aquæ tepid. mane et vespere.

27th. Medicine operated well Hand less painful. Night comfortable.

Appl. cerat. simpl. quarta quaq. hora. Bene lavet. vuln.

28th.

Sumat Tr. rhei,
Aq. āā ℥i. M. Statim.

Omitt. catapl.

29th. Medicine operated well. Appears to be much easier than formerly. Hand not offensive.

Foment. cum tanacet. et absinth. bis in die. Remov. empl. ter in die.

31st. A large piece of loose skin was removed from the hand on the 29th. Hand has a more healthy appearance.

Sumat Tr. rhei,
Aquæ, āā ℥ij. M.

After this the wound healed rapidly under a dressing of resinous cerate, and bathing twice a day with soap and water.

The fingers are slightly movable. The forefinger, which at first it was thought impossible to save, is likely to prove useful to the patient in the absence of the thumb.

By good management and the great advantages of the Hospital, this patient's hand was saved. With the common disadvantages of persons in his situation, he would have lost his hand. If he had been an intemperate man he would have lost his life.

Fungus Hæmatodes of the Antrum.

April. 1. An interesting case presented itself at the Hospital this day. The patient, a married woman of 34, living at Malden, applied to Dr. Buck, of that town, about ten days since; who, finding the case a bad one, recommended her to come to the Hospital for advice. Dr. Warren, on examining her, found an obstruction of the left nostril, which was produced by a tumor evidently of a red color, occupying the middle part of the middle meatus, or passage of the nostril. From this tumor blood issued sometimes, and also a constant discharge of very offensive matter. She has sometimes severe pains in the cheek bone, left ear and left eye. The vision of the left eye is slightly affected, and the function of the left ear very much impaired. Above the two incisor teeth of the left side are two apertures in the bone, through which matter is discharged. The teeth of the upper jaw on the left side are all of them in a decaying state, and the front teeth broken, from weakness. The patient suffers great distress at periods.

About twenty years ago she had a lung fever, which injured her constitution; and the teeth of the upper jaw, on the left side especially, have been bad ever since. About a year ago she began to feel an uneasiness in that part of the face, and some months since the bone above the front teeth ulcerated. It is a few weeks only since her attention was distinctly called to the left nostril.

The board of Consulting Physicians having a meeting at the Hospital, Dr. Warren took the opportunity of presenting to them this case for their examination and opinion. Present, Drs. Welsh, Spooner, Dixwell, Thompson and Walker; also the attending physician of the Hospital, Dr. Jackson; and Dr. Buck, who had been first consulted by the patient.

The board united in opinion that the disease was a malignant fungus springing from the antrum maxilare, whence it had made its way into the left nostril; that it probably had its origin in the defective teeth, or some one of them; and that it would terminate fatally in a lingering and most painful death. In regard to the propriety of attempting any thing to save the patient, there was some difference of opinion. On the one side, it was said that all operations for the relief of this disease had been hitherto unsuccessful; that the patient would be exposed to the additional suffering of a severe operation, without any prospect of its succeeding; and that thus the result would be discreditable to the Hospital and to the operator. On the other hand, it was urged, that if no operations were attempted but those which had before succeeded, no improvements would be made in surgery; that the cases in which the operation had failed were, so far as the experience of the surgeons present extended, or so far as they had read, such as had been allowed to reach a more advanced stage than this; that the disease in this case being at present of an extent comparatively small, and having its probable origin in one of the roots of the molar teeth, might possibly be eradicated by removing the bone from which it sprung; that the antrum could be opened from the face, and then the maxillary bone under the antrum cut away to such extent as the seat of the disease might require; that the arteries involved in this operation were not large, and might be secured without difficulty, or if it was necessary to involve large arteries, the carotid

artery might be secured; that the nerves implicated were indeed numerous, but their division or destruction would not be productive of serious consequences; and finally, that the patient would thus have some chance of life, which would otherwise be destroyed by one of the most protracted, disgusting and distressing of diseases.

Influenced by these considerations, the board agreed that the nature of the case, and the practicability of an operation with the uncertainty of its result, should be made known to the patient; and that if on a full knowledge of the difficulties, she should determine to undergo an operation, it would then be expedient to attempt and execute it in the best possible manner. Her family physician was then requested to undertake the task of instructing her.

BOSTON, TUESDAY, MAY 20, 1828.

THE AMERICAN MEDICAL BIOGRAPHY.

The American Medical Biography, by Dr. Thacher, which has been some time expected, is now published. It is a work of much interest, as a history of medicine in this country; and as it points out the steps by which distinguished men have risen in medical practice and reputation. To young physicians especially this work will afford abundance of useful instruction. The study of biography is one of the best modes of improving the character of men. It teaches us by lively and impressive pictures what we should imitate and what we should avoid: and by showing the improvement which others have made, it generates a salutary ambition to effect something for the good of the human race; and something which may leave such traces of our labors as death will not efface.

This work will in some measure correct the popular notion that physicians are generally sceptical in opinion and relaxed in morals; for it will be seen that a considerable number of the most successful and eminent physicians in this country have been distinguished for their moral and religious character.

Dr. Robbins' Remarks on the Proceedings of the "Medical Society of the District of Columbia," and on the paper of Dr. Hayward, are received, and will appear in the next number.

WEEKLY REPORT OF DEATHS IN BOSTON,

Ending May 9, at noon.

May 2.	Sarah Dix,	36 yrs.
3.	William M. S. Doyle,	59
	Joanna Fovell,	58
4.	Ann Maria Coburn,	7 mo.
	Sarah Blanchard,	53 yrs.
	Maria A. Stone,	6 mo.
5.	Elizabeth A. S. Floyd,	14
	Mary Bradford,	74 yrs.
	James L. Gowdy,	18 mo.
6.	Benjamin H. Luckis,	4 yrs.
	Francis Fox,	16
	Nathan L. Brown,	5 mo.
	Isabella Farrell,	27 yrs.
	Thomas K. Williams,	35
	Mary Batts,	33
	Rufus G. Franum,	5 mo.
7.	Mehitable Gomer,	32 yrs.
	John Brazer,	75
	Frederick N. Hard,	46
	Thomas Bumstead,	88
8.	Ellis Gray,	51
	John Cary,	50
	Helen Maria Emerson,	6 wks.
	Edward McConway,	9 mo.
	John Jenkins,	30 yrs.
9.	John Skelton,	53
	Col. Benjamin Hayden,	68
	William B. Henry,	44

Accidental, 1—apoplexy, 1—consumption, 5—croup, 1—dropsy in the head, 2—dropsy in the chest, 1—hooping cough, 1—inflammatory fever, 1—lung fever, 7—old age, 2—suicide, 1—venereal delirium, 1—unknown, 4. Males, 17—females 11. Stillborn, 1. Total, 28.

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